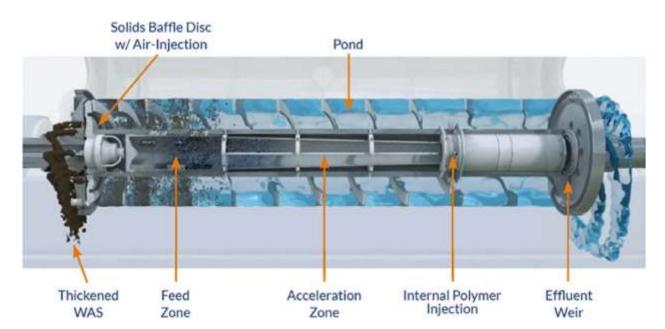
## The Case of the Missing 100 Acre Wood Sign

During a routine processing of wastewater, the city's Water Resource Management (WRM) team noticed a significant drop in the solids process flow from 320 gallons per minute (gpm) to only 180 gpm.

WRM staff, contractors and the wastewater centrifuge manufacturer attempted to identify the cause of the problem and began brainstorming a number of scenarios to investigate.



## Wastewater Centrifuge System

After identifying several possible issues, the team decided it would be best to disassemble the pump. Working together, they disassembled and reassembled portions of the unit; however the problem remained.

The team checked the gears which proved to be in working order. They then contacted the equipment manufacturer who recommended additional repair options for the team to consider; including replacing a section of the unit with a spare part.

Meanwhile, the solids continued to accumulate in the system.

Using specialized heavy equipment, the team took a large, heavy part (thickener scroll) from another machine and placed it onto the malfunctioning unit.

After replacing the scroll, the team decided to check the machine's feed zone.

It should be noted that experience has taught professionals in this field that if certain

conditions exist, there is no chance that something would be wrong in the feed zone.

However, the team decided to check it anyways; and after disassembling another piece of the unit, there it was, a Winnie the Pooh 100 Acre Wood Sign toy.



The odds of this 2"x2.5" toy sign getting lodged in that exact location, in perfect position, and having the exact dimensions to fit over the tube, would be the same odds as the same person winning the lottery...twice!

It is not uncommon to find toys like this on the screens (large pieces of equipment that capture wastewater debris) at the plant but somehow this one made it through to the centrifuge.

In total, the cost to the city to remove the Winnie the Pooh toy from the wastewater system was more than \$40,000!

By partnering with the city and being a Guardian Regarding Our Sewer System, we can prevent incidents like this from happening in the future!